# Liverpool John Moores University

Title:	BUILDING SERVICES INTEGRATED DESIGN PROJECT
Status:	Definitive
Code:	<b>5103BEUG</b> (118101)
Version Start Date:	01-08-2011
Owning School/Faculty:	Built Environment
Teaching School/Faculty:	Built Environment

Team	Leader
Andy Shaw	Y
Laurence Brady	

Academic Level:	FHEQ5	Credit Value:	24	Total Delivered Hours:	60
Total Learning Hours:	240	Private Study:	180		

### **Delivery Options**

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	12
Tutorial	48

### Grading Basis: 40 %

## Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Portfolio	70	
Presentation	AS2	Presentation	10	
Report	AS3	Report	20	

### Aims

To provide a framework for subject integration within a major piece of work that reflects the type of performance and level of ability expected of professional Building Services project personnel.

To develop and refine skills necessary for the development, management and successful completion of a significant project.

To develop and refine written, verbal, graphical and presentation skills. To encourage students to reflect on their level of competency and provide an opportunity for development across a wide range of skills.

# **Learning Outcomes**

After completing the module the student should be able to:

- 1 Interpret project briefs and assimilate information from a variety of sources in order to define and contextualize the scope and complexity of a project.
- 2 Identify and successfully complete appropriate investigative work.
- 3 Propose, test and select feasible solutions to specified tasks and problems across a range of building services related subjects.
- 4 Apply, evaluate and justify appropriate solutions to specified tasks and problems across a range of building services related subjects.
- 5 Apply the principles and practices of planning, time and task management effectively.
- 6 Communicate concepts, proposals and strategies to technical and non-technical audiences using a variety of media.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

PORTFOLIO	1	2	3
PRESENTATION	6		
REPORT	4	5	

# **Outline Syllabus**

The module serves as a vehicle for the application and development of the students knowledge, skills and understanding developed in other modules of the course. An essential feature of the module is the integration of the various modules within a particular building services vocational pathway.

The structure and detail of the project calls for:

Needs Analysis: Interpreting and assimilating the project brief, client familiarisation, scope and requirements of the project, aims, objectives and targets, identification of legislative and other constraints.

Feasibility: Investigation and analysis of possible solutions.

Detailed Proposals: Selection and development of detailed solutions to set tasks. Evaluation: Critical analysis of proposals.

Planning and task management: Planning, time management, work allocation, progress review, standards and quality control, record keeping and documentation. Evaluation, Presentation & Review: review and evaluation of final outcomes, presentation of outcomes and final documentations via written, verbal, graphical and

presentation of outcomes and final documentations via written, verbal, graphical and multi-media presentations

# **Learning Activities**

The module in delivered through a large multi-task project which requires the students to produce designs or propose commercial procedures, recommendations, solutions for tasks based on the building services needs of a complex building. The specific tasks of the project are selected to reflect the particular aspects of building engineering services in which the student specialises. Inter-disciplinary working is actively encouraged and facilitated.

## References

Course Material	Book
Author	Levin P
Publishing Year	2006
Title	Perfect Presentations
Subtitle	
Edition	
Publisher	OUP
ISBN	0335219055

Course Material	Book
Author	Shepherd K
Publishing Year	2005
Title	Presenting at Conferences, Seminars and Meetings
Subtitle	
Edition	
Publisher	Sage
ISBN	000722268

Course Material	Book
Author	Ellis, R
Publishing Year	1999
Title	'Constructive Communication :Skills for the Building
	Industry'
Subtitle	
Edition	
Publisher	Arnold
ISBN	0340720077

Course Material	Book
Author	CIBSE
Publishing Year	2006
Title	CIBSE Guide A: Environmental Design'
Subtitle	
Edition	
Publisher	CIBSE
ISBN	1903287669

Course Material	Book
Author	CIBSE
Publishing Year	2002
Title	CIBSE Guide B: Heating, ventilating, air conditioning and refrigeration'
Subtitle	
Edition	
Publisher	CIBSE
ISBN	1903287588

Course Material	Book
Author	CIBSE
Publishing Year	2007
Title	CIBSE Guide C: Reference data'
Subtitle	
Edition	
Publisher	CIBSE
ISBN	9781903287804

<b>Course Material</b>	Book
Author	CIBSE
Publishing Year	2005
Title	CIBSE Guide K: Electricity in buildings'
Subtitle	
Edition	
Publisher	CIBSE
ISBN	90328726X

# Notes

This module provides the students with an opportunity to demonstrate their learning from all modules across their programme. The module requires the students to complete a specific building services project working within small teams, which should be multi-disciplinary where the mixture of specialisms within a student cohort allow.